



FACT SHEET

## GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S. Department of Energy's Grid Deployment Office is administering a historic \$10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

# INCREASING GRID VISIBILITY ACROSS THE AMERICAN EAST AND MIDWEST

AEP's Advanced Distribution Management System and Distributed Energy Resource Management System (ADMS & DERMS) Initiative would implement ADMS software with an operational DERMS module to increase grid visibility and management of AEP's distribution capabilities and improve service for AEP customers across its service territory in 11 states. This project will support a suite of functions, including fault location isolation service restoration (FLISR) and distribution operations training

simulators (DOTS) for distribution management and grid optimization, in addition to deploying a DERMS to administer, monitor, and control distributed energy resources (DER) for grid reliability, efficiency, and overall performance.

#### **Anticipated Outcomes and Benefits**

The proposed work will transform distribution management and the administration of DERs in huge swaths of the American East and Midwest, facilitating more reliable grid conditions, lower energy costs, and economic investment to impacted communities, including:

- Improved grid visibility and management to expedite responses to faults and disruptions and to reduce customers' service interruptions.
- Improved grid reliability by approximately 5%, avoiding productivity loss worth as much as \$1.9 billion over a 20-year period.
- Additional potential savings from volt/voltampere reactive optimization (VVO) centralization made available to AEP's customers.
- > Transition to cleaner distributed energy resources through enhanced asset management.
- Strong focus on targeting vulnerable, hard-to-reach communities, with 54% of benefits flowing to <u>disadvantaged communities</u> (DACs).
- > Increase in clean energy jobs and job training for individuals, especially in emerging renewable energy industries.
- Up to \$7.8 million allocated to small suppliers and \$5.8 million to minority-owned, women-owned, and veteran-owned suppliers.
- Investment in distributed energy resources, including community solar developments.

#### **PROJECT DETAILS**

- > Project:AEP ADMS & DERMS Initiative
- Applicant/Selectee:

   American Electric Power
   Service Corporation
- GRIP Program:
   Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- Federal cost share: \$27,849,763
- > Recipient cost share: \$27,849,763
- Project Location:
   Arkansas, Indiana, Kentucky, Louisiana,
   Michigan, Ohio, Oklahoma, Tennessee,
   Texas, Virginia, and West Virginia
- Project type:Visibility and Control

### **HELPFUL LINKS**

- > Grid Resilience and Innovation Partnerships Program
- > About the Grid Deployment Office